

hand or an eye. In 1940, epilepsy, next to dementia praecox, was the most frequent medical cause for discharge from the Army. War injuries will swell the numbers. Many State Bureaus of Rehabilitation are forbidden to aid in the training of epileptics on the grounds that they are unemployable. Let us hope that this foul idea will not seep into the plans for the rehabilitation of wounded service men.

As discussed elsewhere,<sup>1,4</sup> an enlightened public is a prerequisite to an intelligent handling of this problem. The American Epilepsy League is a valuable agency in public education. Physicians need to be more acutely aware of recent advances in the study and treatment of seizures, and of the therapeutic value of keeping a patient at work.

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## TUBERCULOSIS IN INDUSTRY\*

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WHEN tuberculosis is not diagnosed until the patient is aware of symptoms severe enough to send him to the doctor, the disease is usually moderately or far advanced. Industrial surveys done through the use of miniature x-rays taken by the tuberculosis associations have proven that if tuberculosis is to be discovered in the early and most curable stages, it must be done through the use of mass surveys and routine x-rays of population.

There are two points to be considered in discussing tuberculosis as an industrial hazard. One must be exposed to an open case, and infected, in order to contract the disease, or working conditions must be such as to aggravate a preëxisting infection. In the first group are those who are working in health, such as hospital employees, who are exposed to tuberculosis, particularly in general hospitals where they are in contact with unrecognized cases and no precautions are taken to protect them. (Tuberculosis wards, while a recognized hazard, now use a strict technique). In the same group are those who are exposed in industry through fellow workmen who are open cases of tuberculosis. This is the most important group and by far the largest. The second group includes those who have had preëxisting disease, and work under conditions which aggravate this to the point of reactivation. (In such instances it is not the type of occupation *per se* which is apt to cause the reactivation, but rather the imposition of a long work day, a long work week, inadequate rest, and insufficient nourishment to sustain the required energy output. Statistics and experience reveal few instances where an occupational environment itself causes the onset of reactivation of tuberculosis.) Many of these cases could be prevented if physicians would use sputum cultures and better laboratory work as a criteria for permitting convalescent patients to return to work; or would show sufficient interest in each individual case to advise the worker and coöperate with his employer in the selection of a suitable occupation.

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One possible means of eliminating tuberculosis would be to x-ray the entire population of a given area at yearly intervals for five years, at the same time isolating and treating all communicable cases. The general practitioner and the radiologist can do much toward this.

Paralleling the case-finding work done through x-rays in the induction centers, the tuberculosis associations throughout the country have been working in industries. X-ray units permitting both 4" x 5" and 35 millimeter photographs of the fluoroscopic images of chests have been mounted in trucks and taken into industrial plants and housing units where there were no plant x-rays available, and, as a demonstration project, thousands of workers have been filmed. Demonstrable evidence of pulmonary tuberculosis has been found in from 1 to 5 per cent in the individuals x-rayed by this method, the average running about 3 per cent in most places. About one-half of these were found, on follow-up, to be active cases. These same surveys have uncovered a high percentage of cardiac cases which were undiagnosed prior to this examination.

The policy has been to notify the employee that there are abnormal findings in his chest, and suggest that he consult a physician and arrange for a 14 x 17 film to be taken. The need for better diagnostic work has been shown with a large number of persons who, after receiving the letter advising them to go to their physician, did so and were told that there was nothing wrong, and then subsequent laboratory examinations of the sputum revealed tubercle bacilli! This would indicate that more thought should be given to the proper handling of these survey cases; that less indifference and better coöperation should be exhibited by the family physician, and that communicable cases should be isolated.

There were 56,178 deaths from tuberculosis in the United States in 1943, of which California furnished 3,878, and 7,869 new cases were reported, averaging two new cases for each death. With a high percentage of these cases occurring in industry, it will take the coöperation of the private physician, the plant medical department, the volunteer agencies, as well as the local and State health departments, before this hazard can be controlled. Industry and our schools afford an excellent opportunity for mass surveys which, if combined with a proper follow-up system, will greatly reduce the incidence of tuberculosis in America.

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## VENEREAL DISEASE CONTROL IN INDUSTRY\*

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AN industrial group presents an admirable opportunity for the control of communicable diseases in a substantial adult population. This is as true of the venereal diseases as it is of tuberculosis, smallpox, the common cold, or any other communicable disease.

The venereal disease problem in occupational groups is no greater than it is for the general public. Substantially, employed groups and their families represent, or rather are, the general public. Public health agencies have in the past directed their attentions to school groups because in such is an already prepared, homogeneous group to which mass case-finding surveys and educational programs can be applied. The same is true of an employee

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